

**REMARKS**

Reconsideration and allowance of the pending claims are respectfully requested.

Interview Summary

Applicants thank Examiner Nina Archie for the telephonic interview on June 13, 2009, and the courtesies extended to Applicants' representatives. During the telephone interview Applicants' representatives, Sean Myers-Payne and Thomas Weber, requested clarification as to which claims had allowable subject matter.

During the conference, the Examiner indicated that claims 3 and 4 are allowable if they are rewritten into independent form.

Formal Matters

Applicants note with appreciation that the Office has withdrawn the prior rejection under 35 U.S.C. § 112, first paragraph.

Applicants further note with appreciation that claims 3 and 4 are free of the art and have allowable subject matter. Furthermore, claims 3 and 4 are allowable if rewritten in independent form, as indicated in the telephone interview with the Examiner.

Response to Claim Rejections under 35 U.S.C. § 102(b)

The Action rejects claims 1 and 2 under 35 U.S.C. § 102(b) as allegedly being anticipated by Zharkov et al. (Journal of Biological Chemistry, (2000), Vol. 275, No. 37, pages 28607-28617, hereinafter "Zharkov"). The Action alleges that Zharkov teaches a polynucleotide

comprising a CpG motif wherein guanine is methylated and the methylated guanine is 6-O-methyl-2'-deoxyguanosine, wherein the length is 23 oligonucleotides (Office Action, page 3).

In response, Applicants respectfully submit that Zharkov does not anticipate claim 1, or claim 2, which depends from claim 1. Contrary to the Action's assertions, Zharkov does not disclose 6-O-methyl-2'-deoxyguanosine, but rather discloses a polynucleotide comprising 8-oxo-7,8-dihydro-6-O-methyl-2'-deoxyguanosine, which is an entirely different polynucleotide from that recited in claim 1.

Inasmuch as Zharkov fails to disclose the polynucleotide of claim 1, Zharkov fails to anticipate claims 1 and 2. Accordingly, Applicants respectfully request withdrawal of the rejection under 35 U.S.C. § 102(b).

#### Response to Claim Rejections under 35 U.S.C. § 103

The Action rejects claims 1 and 5 under 35 U.S.C. § 103 as allegedly being unpatentable over Zharkov and Krieg et al. (WO 1998/018810, hereinafter "Krieg"). The Action states that Zharkov fails to teach a polynucleotide wherein a pharmaceutical composition which comprises the polynucleotide as an active ingredient and at least one pharmaceutically acceptable excipient. The Action relies on Krieg to remedy this deficiency.

Initially, Applicants note that it is unclear why claim 1 is included in the rejection as the office asserts that claim 1 is anticipated and provides no reasoning as to why it is also obvious. Turning to the ground of rejection, Applicants submit that neither Zharkov nor Krieg, either alone or in combination, renders obvious the presently claimed 6-O-methyl-2'-deoxyguanosine in a CpG motif. As noted above, Zharkov discloses 8-oxo-7,8-dihydro-6-O-methyl-2'-deoxyguanosine, and fails to disclose 6-O-methyl-2'-deoxyguanosine of the present invention.

Applicants submit that there is no reason or motivation to modify Zharkov to arrive at the present invention. Applicants submit that the Action fails to state any reason to modify Zharkov, because, Applicants submit, none is present. Applicants note that Zharkov discloses only a mutagenic effect of the polynucleotide comprising 8-oxo-7,8-dihydro-6-O-methyl-2'-deoxyguanosine, while the polynucleotide comprising 6-O-methyl-2'-deoxyguanosine of the present invention has immunosuppressive properties. Applicants submit that there is nothing in Zharkov that would lead to any modification to arrive at the invention of claim 1.

Applicants further submit that Krieg fails to remedy the deficiencies of Zharkov. Applicants note that Krieg discloses *unmethylated* CpG and *cytosine-methylated* CpG, and fails to disclose 6-O-methyl-2'-deoxyguanosine. Applicants note that Krieg does not teach or suggest the missing features of Zharkov. Therefore, Applicants respectfully submit that neither Zharkov nor Krieg, alone or in combination, teach or suggest the claimed invention.

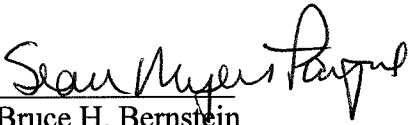
Accordingly, for at least the foregoing reason, Applicants respectfully request withdrawal of the obviousness rejections.

### **CONCLUSION**

In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections of record, and allow all the pending claims. Applicants respectfully submit that the Action has not presented an anticipation rejection and has not established a *prima facie* case of obviousness in the rejections of claims 1-5.

Should there be any questions, the Examiner is invited to contact the undersigned at the below listed telephone number.

Respectfully Submitted,  
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